REMARKS

This is intended as a full and complete response to the Office Action dated December 15, 2005, having a shortened statutory period for response set to expire on March 15, 2006. Please reconsider the claims pending in the application for reasons discussed below.

In the specification, the paragraphs [0001] and [0003] have been amended to correct minor editorial problems.

Claims 1-25 are pending in the application. Claims 1, 3, 4, 9, 11, 12, 13, 16, 21, 22, 23, and 24 have been amended. Claims 2, 5, 10, 14-15 and 25 have been canceled. Applicants submit that the amendments and new claims do not introduce new matter.

Claim Rejections - 35 U.S.C. § 101

Claims 21-25 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claims 21-25 have been amended as suggested by the Examiner. Accordingly, Applicants request that this rejection be withdrawn.

Claim Rejections - 35 U.S.C. § 112

Claims 1-25 are rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Applicants have amended the claims to address inconsistencies pointed out by the Examiner. Applicants believe the amendments address the issues raised by the rejection.

PAGE 14/20 * RCVD AT 3/15/2006 10:45:04 PM [Eastern Standard Time] * SVR:USPTO-EFXRF-5/10 * DNIS:2738300 * CSID:7136234846 * DURATION (mm-ss):04-44

More, specifically, the Examiner raises the following issue regarding 35 U.S.C. § 112, first paragraph:

> Applicant has claimed a two-layer version of the commonly known OSI model. The independent and dependent claims, as well as the specification, lead the Examiner to believe that Applicant has designed this new version of the OSI model with the "second" layer being the physical layer and the "first" layer being an unknown higher layer which is an apparent composite of the data link, network, transport, session, application, and presentation layers of the OSI model in common use.

Office Action, p. 3. In response, Applicants point out that the method recited by the present claims may be practiced for a layered sequence of data communication protocols that includes *at least* a first protocol layer and a second protocol layer. See, e.g., claim 1. Applicants' specification describes the invention being implemented generally using the layers of the well-known TCP/IP networking model. Quite plainly, the invention, as claimed, is meant to be adapted to a network model with *at least* two protocol layers. No limitation of the present claims would require the "second layer" to be the physical layer of the OSI model as suggested by the Examiner.

The Examiner further raises the following issue regarding 35 U.S.C. § 112, first paragraph:

> Applicant's invention destroys the OSI model and the point of having multiple layers. During encapsulation, the outer header is added to the present data without altering the data that already exists. No method exists in current networking theory or implementation that allows for alteration of an interior encapsulated data fragment, segment, frame, packet, etc. at the same time as it is being further. [sic]

Office Action, p. 3. In response, Applicants point out that the present claims include "generating a first layer protocol data unit (PDU) by ... reserving a space in the first header for an identifier" and "generating a second PDU by ... reserving a space in the second header for an identifier." In each case, the action of reserving a space is done by the layer associated with a given header for the layer associated with that header. No "alteration of an interior encapsulated data fragment, segment, frame, packet, etc." is recited being performed by the present claims. Instead, as pointed

PAGE 15/20 * RCVD AT 3/15/2006 10:45:04 PM [Eastern Standard Time] * SVR:USPTO-EFXRF-5/10 * DNIS:2738300 * CSID:7136234846 * DURATION (mm-ss):04-44

out in paragraph 27 of Applicants' specification, "In accordance with another embodiment of the present invention, the space is reserved at the header of each protocol layer in the sending computer after that header of that particular protocol layer is attached and prior to sending the data with that header to the lower protocol layer for further processing."

The Examiner further raises the following issue regarding 35 U.S.C. § 112, first paragraph:

> Applicant's definition of identifier is conflicting with itself. Applicant has claimed the creation of a single identifier to be implemented in "both" layers at the same time, apparently occurring at the lowest or physical layer. Applicant states on page 11, paragraph 28 of the specification that each individual layer can have its own unique identifier. Applicant further states that each identifier can be a global identifier and a unique identifier. Applicant further states that each identifier can be "universally unique". The phrase "universally unique" is contradictory on the surface since "universal" and "unique" are two opposing terms. Something that is "universal" in nature is not "unique" in nature. Applicant speaks to creating an identifier constituting a global identifier and a unique identifier. It is unclear if this is what Applicant means by a "universally unique" identifier. It is unclear how a global and unique identifier are created and/or supported by the specification.

See Office Action, p.4-5. Respectfully, the Examiner is mixing an identifier that may be generated by different layers of a layered protocol sequence (e.g., a packet sequence number generated by a transport layer protocol) with the identifier as recited by the present claims. Further, regarding the terms "universal" and "unique" the Applicants respectfully disagree with the Examiner. Something can be unique within a given domain, but not unique universally. For a common example of this phenomenon, consider a telephone number, within any given area code, each seven digit telephone number is unique (e.g., 555-1234), but not universally since the same number may be assigned to individuals in different regions having different area codes. By comparison DNA for a given human being is universally unique – that is, no other person in the universe has the same DNA code. The paragraphs of the specification referenced by the Examiner disclosure a similar phenomenon.

PAGE 16/20 * RCVD AT 3/15/2006 10:45:04 PM [Eastern Standard Time] * SVR:USPTO-EFXRF-5/10 * DNIS:2738300 * CSID:7136234846 * DURATION (mm-ss):04-44

Specifically, paragraph 28 provides in part "In accordance with an embodiment of the invention, each header has two identifiers – the global identifier that is the same for the header in each protocol layer and an identifier that is generated by that particular protocol layer." Like the telephone number, "the header in each protocol layer" may be unique to a protocol data unit of that layer. At the same time, the global identifier may be used to identify the data ultimately being transmitted at any layer of a sequence of layered protocols. Thus, in this context, the "universe" in which the global identifier is unique is defined by all layers of a sequence of layered protocols.

The Examiner also raises the following issue regarding 35 U.S.C. § 112, second paragraph:

> The term "first protocol layer" in claims 1, 2, 5, 7, 9, 10, 11, 14, 15, 21, 22, 23, and 25 is a relative term which renders the claims indefinite. The term "first protocol layer" is not defined by the claims, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. It is unclear if the first protocol layer is the layer closest to the physical layer or the layer farthest from the physical layer. This is true also for the second protocol layer.

See Office Action, p.5. Applicants respectfully disagree. As amended, the adjectives "first" and "second," distinguish the two protocol layers from one another, as recited by the present claims, and are not meant a reference to "the layer closest to the physical layer or the layer farthest from the physical layer."

The Examiner further raises the following issue regarding 35 U.S.C. § 112, second paragraph:

> The terms "lowest protocol layer" and "highest protocol layer" in claims 3, 4, 12, 13, 19, and 20 are relative terms which render the claims indefinite. The terms "lowest protocol layer" and "highest protocol layer" are not defined by the claims, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. It is unclear if the lowest protocol layer is the layer closest to the physical layer or the layer farthest from the physical layer. This is true also for the highest protocol layer.

PAGE 17/20 * RCVD AT 3/15/2006 10:45:04 PM [Eastern Standard Time] * SVR:USPTO-EFXRF-5/10 * DNIS:2738300 * CSID:7136234846 * DURATION (mm-ss):04-44

See Office Action, p.5. As amended, these claims recite a "lowest protocol layer" and/or a "highest protocol layer in reference to a layered sequence of data communication protocols. Applicants submit that the amendments should cure any indefinite originally present in these claims. Furthermore, Applicants submit that protocol layers of a protocol stack are often described as being "higher" or "lower" relative to one another. For example, the specification includes the following general description:

> Generally speaking, application, presentation and session layers are defined as upper layers, while transport, network and data link layers are defined as lower layers.

Application, ¶ 5. Accordingly, Applicants submit that the meaning of these terms is readily apparent to one of skill in the art.

In summary, Applicants respectfully submit that the Examiner's rejections are believed to be based on misunderstanding regarding what the Applicant seeks to claim. However, some of these misunderstanding may have been a result of certain ambiguities, which the present amendments are believed to cure. Therefore, Applicants respectfully request that the rejection be withdrawn and the claims be allowed.

Claim Rejections - 35 U.S.C. § 102

Claims 16, 18-19, and 24 are rejected under 35 U.S.C. 102(b) as being anticipated by *Zinky et al.* ("Visualizing Packet Traces").

Applicants respectfully traverse this rejection.

Regarding claims 16 and 24: "A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). "The identical invention must be shown in as complete detail as is contained in the ... claim." *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989). The

PAGE 18/20 * RCVD AT 3/15/2006 10:45:04 PM [Eastern Standard Time] * SVR:USPTO-EFXRF-5/10 * DNIS:2738300 * CSID:7136234846 * DURATION (mm-ss):04-44

elements must be arranged as required by the claim. *In re Bond*, 910 F.2d 831, 15 USPQ2d 1566 (Fed. Cir. 1990).

In this case, *Zinky* does not disclose "each and every element as set forth in the claim." For example, *Zinky* does not disclose reserving a space for the identifier in the header added to the data at of each successive protocol layer. The Examiner argues that *Zinky* discloses this element, for example, in Figure 4. However, the cited passage is in fact directed to the definition of a specific header. In particular, an HDLC (High-Level Data Link Control) packet header. Nothing in this passage discloses reserving a space for the identifier in the header added to the data at of each successive protocol layer. Therefore, these claims 16 and 24 are believed to be allowable, and allowance of the claims is respectfully requested.

Claims 18-19 depend from claim 16. Regarding these claims, Applicants submit, for the reasons given above, that *Zinky* fails to disclose reserving a space for the identifier in the header added to the data at of each successive protocol layer as recited by claim 16. Applicants submit, therefore, that the rejection of claims 18-19 is obviated without the need for further remarks. Accordingly, respectfully request that the Examiner withdraw this rejection.

Claim Rejections - 35 U.S.C. § 103

Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over *Zinky*. Claim 17 depends from claim 16. Regarding claim 17, Applicants submit, for the reasons given above, that *Zinky* fails to disclose reserving a space for the identifier in the header added to the data at of each successive protocol layer as recited by claim 16. Applicants submit, therefore, that the rejection of claim 17 is obviated without the need for further remarks. Accordingly, respectfully request that the Examiner withdraw this rejection.

Therefore, the claims are believed to be allowable, and allowance of the claims is respectfully requested.

PAGE 19/20 * RCVD AT 3/15/2006 10:45:04 PM [Eastern Standard Time] * SVR:USPTO-EFXRF-5/10 * DNIS:2738300 * CSID:7136234846 * DURATION (mm-ss):04-44

Conclusion

Having addressed all issues set out in the office action, Applicants respectfully submit that the claims are in condition for allowance and respectfully request that the claims be allowed.

If the Examiner believes any issues remain that prevent this application from going to issue, the Examiner is strongly encouraged to contact Gero McClellan, attorney of record, at (336) 643-3065, to discuss strategies for moving prosecution forward toward allowance.

Respectfully submitted, and
S-signed pursuant to 37 CFR 1.4,

/Gero G. McClellan, Reg. No. 44,227/
Gero G. McClellan
Registration No. 44,227
PATTERSON & SHERIDAN, L.L.P.
3040 Post Oak Blvd. Suite 1500
Houston, TX 77056
Telephone: (713) 623-4844
Facsimile: (713) 623-4846
Attorney for Applicants

PAGE 20/20 * RCVD AT 3/15/2006 10:45:04 PM [Eastern Standard Time] * SVR:USPTO-EFXRF-5/10 * DNIS:2738300 * CSID:7136234846 * DURATION (mm-ss):04-44